

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

Final Version 2

NTP Study Number: C03038

Lock Date: 05/25/2016

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 3.0.2.3_002

PWG Approval Date: NONE

Note: Animals arranged according to days on test.

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Lab BAT

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X - Lesion present

I. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

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DAY ON TEST		HARLAN SPRAGUE DAWLEY RATS MALE																									
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0mg/L male	ANIMAL ID	1	1	4	4	4	4	4	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	
		8	8	4	5	5	8	9	0	5	6	7	7	7	8	9	0	1	4	5	9	2	3	3	4	5	
		7	9	5	0	6	2	3	1	1	8	1	4	5	8	3	0	0	4	5	9	2	6	3	4	5	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	4	0	2	2	4	2	3	3	3	3	3	4	5	4	2	1	3	0	0	2	3	3	0	2	1
		3	3	2	5	4	8	7	1	4	8	0	6	0	2	0	1	3	8	1	8	9	2	6	2	2	

males
(cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+

Preputial Gland

+

Prostate

+

Seminal Vesicle
Hemangiosarcoma

+

Testis
Interstitial Cell, Adenoma

+

X

HEMATOPOIETIC SYSTEM

Bone Marrow

+

Lymph Node

+

+

Lymph Node, Mandibular

+

Lymph Node, Mesenteric

+

Spleen

+

Thymus

+

M

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Lab: BAT

Lab: BAI

ALIMENTARY SYSTEM

* - Total animals with tissue examined microscopically: Total animals with tumor

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X Lesion present

| Insufficient tissue

M .. Missing tissue

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Lab: BAT

	DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																				* TOTALS	
		0 6 5 2	0 6 5 2	0 6 5 4	0 6 6 9	0 6 6 1	0 6 6 6	0 6 7 3	0 6 7 7	0 6 8 2	0 6 8 5	0 6 9 0	0 7 2 2	0 7 2 2	0 7 2 9	0 7 2 9	0 7 2 9	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0		
0mg/L male	ANIMAL ID	0 0 0 2 1	0 0 0 3 5	0 0 0 4 1	0 0 0 4 6	0 0 0 5 4	0 0 0 5 9	0 0 0 0 0															
		1 9	5	1	6	6	4	5	9	0	3	0	9	5	9	7	8	4	5	7	4	3	6
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
CARDIOVASCULAR SYSTEM																							
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
ENDOCRINE SYSTEM																							
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ganglioneuroma																							1
Pheochromocytoma Benign		X	X																				10
Pheochromocytoma Malignant				X																			2
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma																							1
Adenoma, Multiple																							1
Carcinoma																							1
Parathyroid Gland		+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pars Distalis, Adenoma		X	X	X					X														8
Pars Distalis, Carcinoma																							1
Pars Intermedia, Adenoma																							1
Pars Nervosa, Schwannoma Malignant																							1
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Adenoma																							4

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GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HARLAN SPRAGUE DAWLEY RATS MALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
0mg/L male	5	5	5	5	6	6	7	7	8	8	9	9	2	2	2	2	2	2	2	2	3
ANIMAL ID	2	2	4	9	1	6	3	7	2	5	0	1	2	2	9	2	9	2	9	3	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	3	4	2	1	0	1	4	4	0	1	1	0	0	1	1	4	4	0	1
	1	9	5	1	6	6	4	5	9	0	3	0	9	5	9	7	8	4	5	7	4
																					7

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Keratoacanthoma																				X	1
Subcutaneous Tissue, Fibroma																					3

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Glioma Malignant																			X	2	
Granular Cell Tumor Malignant																			X	1	
Peripheral Nerve																					1
Spinal Cord																					1

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Alveolar/Bronchiolar Adenoma																				X	1
Alveolar/Bronchiolar Carcinoma																				X	1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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HARLAN SPRAGUE DAWLEY RATS MALE	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
0mg/L male	5	5	5	5	6	6	7	7	8	8	9	9	2	2	2	2	2	2	2	2	2	2	2	3	3	3
ANIMAL ID	2	2	4	9	1	6	3	7	2	5	0	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	3	4	2	1	0	1	4	4	0	1	1	0	0	0	1	1	4	4	0	1	2	3	3	4
	1	9	5	1	6	6	4	5	9	0	3	0	9	5	9	7	8	4	5	7	4	3	6	7	7	7

* TOTALS

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Zymbal's Gland Adenocarcinoma																										1	1

URINARY SYSTEM

Kidney Renal Tubule, Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																										1	1

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 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 250mg/L male	DAY ON TEST ANIMAL ID	males (cont...)																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	3	3	4	4	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	7
	5	4	5	2	6	5	5	7	6	6	3	5	0	1	6	7	2	6	7	8	8	5	7	9	2
	6	8	8	8	0	0	7	6	6	3	5	0	0	1	6	7	2	6	7	8	8	5	7	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	9	5	5	7	8	9	7	9	5	6	6	6	5	8	8	5	7	7	5	9	7	6	7	6
	6	2	5	8	3	1	3	2	1	7	7	0	9	1	3	4	2	7	1	9	5	5	1	9	3

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Carcinosarcoma, Metastatic, Zymbal'S Gland																										
Mesentery																										
Paraganglioma																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Acinus, Adenocarcinoma																										
Acinus, Adenoma																										
Acinus, Adenoma, Multiple																										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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HARLAN SPRAGUE DAWLEY RATS MALE 250mg/L male	DAY ON TEST ANIMAL ID	males (cont...)																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	3	3	4	4	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	7
	5	4	5	2	6	5	5	7	6	6	3	5	0	1	6	6	7	6	7	8	8	5	7	9	2
	6	8	8	8	0	0	7	6	6	3	5	0	0	1	6	6	7	6	7	8	8	5	7	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	9	5	5	7	8	9	7	9	5	6	6	6	5	8	8	5	7	7	5	9	7	6	7	6
	6	2	5	8	3	1	3	2	1	7	7	0	9	1	3	4	2	7	1	9	5	5	1	9	3

C-cell, Carcinoma

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+

Preputial Gland

+

Prostate

+

Schwannoma Malignant, Metastatic, Spinal Cord

X

Seminal Vesicle

+

Testis

+

Interstitial Cell, Adenoma

HEMATOPOIETIC SYSTEM

Bone Marrow

+

Carcinosarcoma, Metastatic, Zymbal's Gland

X

Lymph Node

+

Lymph Node, Mandibular

+

Lymph Node, Mesenteric

+

Spleen

+

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Thymus Thymoma Malignant

INTEGUMENTARY SYSTEM

Mammary Gland
Fibroadenoma

- Skin
 - Squamous Cell Papilloma
 - Subcutaneous Tissue, Fibroma
 - Subcutaneous Tissue, Lipoma
 - Subcutaneous Tissue, Sarcoma
 - Subcutaneous Tissue, Schwannoma
- Malignant, Metastatic, Spinal Cord

MUSCULOSKELETAL SYSTEM

Bone

Skeletal Muscle

NERVOUS SYSTEM

Brain

Cranial Nerve, Schwannoma Malignant

Peripheral Nerve

Spinal Cord Schwannoma Malignant

+

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		0 7 2 9																								
ANIMAL ID	0 0 0 6 4	0 0 0 6 5	0 0 0 6 6	0 0 0 7 8	0 0 0 7 7	0 0 0 8 8	0 0 0 8 8	0 0 0 8 8	0 0 0 9 9	0 0 0 9 9	0 0 0 5 5	0 0 0 5 5	0 0 0 6 6	0 0 0 7 7	0 0 0 7 7	0 0 0 8 8	0 0 0 8 8	0 0 0 8 8	0 0 0 9 9	0 0 0 9 9	0 0 0 9 9	0 0 0 9 9	0 0 0 9 9	0 0 0 9 9		
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Carcinosarcoma, Metastatic, Zymbal'S Gland																									1	
Mesentery																									5	
Paraganglioma																									1	
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Acinus, Adenocarcinoma																									3	
Acinus, Adenoma																									5	
Acinus, Adenoma, Multiple																									15	
X																										
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 250mg/L male	DAY ON TEST																									* TOTALS
		0 7 2 9																								
ANIMAL ID	0 0 0 6 4	0 0 0 6 5	0 0 0 6 8	0 0 0 7 4	0 0 0 7 8	0 0 0 8 0	0 0 0 8 2	0 0 0 8 5	0 0 0 8 6	0 0 0 8 7	0 0 0 8 8	0 0 0 8 9	0 0 0 8 9	0 0 0 8 5	0 0 0 5 4	0 0 0 6 3	0 0 0 6 2	0 0 0 7 0	0 0 0 7 6	0 0 0 7 7	0 0 0 8 8	0 0 0 8 9	0 0 0 9 0	0 0 0 9 4	0 0 0 9 9	
C-cell, Carcinoma	X																									1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Schwannoma Malignant, Metastatic, Spinal Cord																										1
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testis Interstitial Cell, Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																										1

HEMATOPOIETIC SYSTEM

Bone Marrow Carcinosarcoma, Metastatic, Zymbal's Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node																										1
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

DAY ON TEST																										
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MALE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
250mg/L male	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	7	7	8	8	8	8	9	9	5	5	5	5	6	7	7	8	8	8	9	9	0
	4	5	6	8	4	8	0	2	5	6	7	8	3	4	6	2	0	6	7	8	9	0	4	9	9	0
	* TOTALS																									

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Alveolar/Bronchiolar Adenoma	X																										1
Carcinosarcoma, Metastatic, Zymbal'S Gland																											1

Nose

Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X - Lesion present

X .. Lesion present

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

DAY ON TEST																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	3	3	4	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MALE	1	7	7	9	1	7	5	7	8	3	5	1	7	2	2	4	4	6	6	7	8	8	9	8
500mg/L male	3	3	7	1	7	5	8	3	5	1	7	2	2	4	6	8	6	3	2	8	8	4	3	7
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3	2	0	4	4	1	1	2	3	4	3	1	1	4	3	2	2	0	2	4	0	1	4	1
	4	8	7	6	1	1	2	6	2	0	8	8	9	2	3	1	4	3	9	9	1	6	7	0

males
(cont...)

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign																								
Pheochromocytoma Malignant																								
Bilateral, Pheochromocytoma Benign																								

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																								
Adenoma, Multiple																								

Carcinoma																								
Parathyroid Gland	+	+	+	+	+	+	M	+	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Adenoma																								
Pars Distalis, Carcinoma																								

Pars Intermedia, Carcinoma																								
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

C-cell, Adenoma																								
C-cell, Carcinoma																								

GENERAL BODY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

NONE

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumo

+ .. Tissue examined microscopically

X Lesion present

X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

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First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

Harderian Gland

Zymbal's Gland Adenoma

-
X

URINARY SYSTEM

Kidney
Nephroblastoma

+

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear
Lymphoma Malignant

* .. Total animals with tissue examined microscopically: Total animals with tumo

+ .. Tissue examined microscopically

X - Lesion present

✓ .. Lesion present

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 500mg/L male	DAY ON TEST																											
		0 7 2 5	0 7 2 9																									
ANIMAL ID	* TOTALS																											
	0 0 1 2 2	0 0 1 0 4	0 0 1 0 5	0 0 1 1 6	0 0 1 1 7	0 0 1 1 0	0 0 1 1 1	0 0 1 1 6	0 0 1 1 7	0 0 1 1 0	0 0 1 1 1	0 0 1 1 6	0 0 1 1 7	0 0 1 1 0	0 0 1 1 1													
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Mesentery	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2		
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Acinus, Adenoma	X	X		X																								5
Acinus, Adenoma, Multiple			X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	15		
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Tongue																												1
Squamous Cell Papilloma																												1

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

DAY ON TEST																											
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	0	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
MALE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
500mg/L male	5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	0	0	0	1	1	1	3	3	3	3	3	5	0	0	0	1	2	2	2	2	3	4	4	4	4	4
	2	4	5	6	3	4	7	0	1	6	7	0	2	8	9	5	0	3	5	7	9	3	4	4	5	8	*

TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pheochromocytoma Benign	X		X																								11
Pheochromocytoma Malignant																											2
Bilateral, Pheochromocytoma Benign																											1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma																											2
Adenoma, Multiple																											1
Carcinoma																											4
Parathyroid Gland	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	45	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pars Distalis, Adenoma																											5
Pars Distalis, Carcinoma																											1
Pars Intermedia, Carcinoma																											1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
C-cell, Adenoma																											5
C-cell, Carcinoma																											4

GENERAL BODY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 500mg/L male	DAY ON TEST																									* TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	0	0	0	1	1	1	3	3	3	3	3	5	0	0	0	1	2	2	2	2	3	4	4	4	4
	2	4	5	6	3	4	7	0	1	6	7	0	2	8	9	5	0	3	5	7	9	3	4	5	8	8

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Penis																										1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node																										3
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Carcinoma, Metastatic, Thyroid Gland																										1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Carcinoma, Metastatic, Thyroid Gland																										1

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

INTEGUMENTARY SYSTEM

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

	DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																									* TOTALS	
		0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7	0 7			
500mg/L male	ANIMAL ID	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0		
		1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1		
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Zymbal's Gland Adenoma																												1 1

URINARY SYSTEM

Kidney Nephroblastoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 2 1
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--------------

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/L male	DAY ON TEST	males (cont...)																													
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hepatocellular Adenoma																																		
Mesentery																																		
Pheochromocytoma																																		
Malignant, Metastatic,																																		
Adrenal Medulla																																		
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Acinus, Adenocarcinoma																																		
Acinus, Adenocarcinoma, Multiple																																		
Acinus, Adenoma																																		
Acinus, Adenoma, Multiple																																		
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/L male	DAY ON TEST																									* TOTALS	
		0 7 2 9																									
ANIMAL ID	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 6	0 0 1 8 7	0 0 1 8 7	0 0 1 8 8														
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hepatocellular Adenoma																										X	1
Mesentery																										+	3
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla																										X	1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Acinus, Adenocarcinoma																										X	2
Acinus, Adenocarcinoma, Multiple																											1
Acinus, Adenoma																										X	5
Acinus, Adenoma, Multiple																										X	11
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/L male	DAY ON TEST ANIMAL ID																									* TOTALS
		0 7 2 9																								
Squamous Cell Papilloma																									X	1
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
CARDIOVASCULAR SYSTEM																										
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Schwannoma Malignant																										1
ENDOCRINE SYSTEM																										
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma																										1
X																										
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pheochromocytoma Benign		X	X	X																						8
Pheochromocytoma Complex																										1
Pheochromocytoma Malignant																										3
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma																										5
Adenoma, Multiple																										1
X																										
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	+	+	45	
Adenoma		X																								2
X																										
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pars Distalis, Adenoma		X	X	X																						7
Pars Intermedia, Adenoma																										1
X																										
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/L male	DAY ON TEST																									* TOTALS	
		0 7 2 9																									
ANIMAL ID	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9	X	X	X	5
	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9	X	1	3	
	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9	X			
	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9				
	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9				
	0 0 1 6 9	0 0 1 7 0	0 0 1 7 2	0 0 1 7 5	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 5	0 0 1 9 5	0 0 1 9 5	0 0 1 9 6	0 0 1 9 6	0 0 1 9 6	0 0 1 9 7	0 0 1 9 7	0 0 1 9 8	0 0 1 9 8	0 0 1 9 9				

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node																									3
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

INTEGUMENTARY SYSTEM

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X.. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

SPECIAL SENSES SYSTEM

URINARY SYSTEM

SYSTEMIC LESIONS

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically: Total animals with tumo

+ .. Tissue examined microscopically

X .. Lesion present

I. Insufficient tissue

M., Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																									females (cont...)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	3	3	4	5	5	5	5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	
	8	4	8	9	0	0	2	5	1	1	1	2	4	5	7	6	9	0	1	1	3	3	3	3	3	
	6	4	7	4	2	4	3	0	7	0	2	9	4	2	6	6	5	8	1	1	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ALIMENTARY SYSTEM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	2	2	2	4	1	4	4	1	3	4	4	3	2	0	3	4	0	0	1	1	0	0	0	0	1
	3	2	0	9	2	7	4	3	1	2	3	7	5	4	4	6	1	2	1	8	6	7	8	9	0	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mesentery	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Granulosa Cell Tumor Malignant, Metastatic, Ovary																									
	Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Granulosa Cell Tumor Malignant, Metastatic, Ovary																									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST ANIMAL ID	female (cont...)																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	3	3	4	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7
	8	4	8	9	0	0	2	5	1	1	1	2	4	5	7	6	7	9	0	1	1	3	3	3	3
	6	4	7	4	2	4	3	0	7	0	2	9	4	2	6	7	6	5	8	1	1	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	2	2	2	4	1	4	4	1	3	4	4	3	2	0	3	4	0	0	1	1	0	0	0	1
	3	2	0	9	2	7	4	3	1	2	3	7	5	4	4	6	1	2	1	8	6	7	8	9	0

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+

Ovary

+

Granulosa Cell Tumor Malignant

Granulosa-Theca Tumor Malignant

X

Uterus

+

Adenocarcinoma

Granulosa Cell Tumor Malignant, Metastatic,
Ovary

Squamous Cell Carcinoma

Cervix, Sarcoma Stromal

X

Cervix, Squamous Cell Carcinoma

X

Cervix, Endometrium, Polyp Stromal

X

Endometrium, Polyp Stromal

X

Endometrium, Polyp Stromal, Multiple

+

Vagina

Polyp

+

HEMATOPOIETIC SYSTEM

Bone Marrow

+

Lymph Node

+

+

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																											* TOTALS	
		0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 1																						
ANIMAL ID	0 0 2 3 2	0 0 2 3 3	0 0 2 4 5	0 0 2 5 0	0 0 2 1 1	* TOTALS																							
Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Small																												1	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Liver Hepatocellular Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
																												1	
Mesentery Granulosa Cell Tumor Malignant, Metastatic, Ovary																												1	
																												X	
Pancreas Granulosa Cell Tumor Malignant, Metastatic, Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
																												X	1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Granulosa Cell Tumor Malignant																						X	1
Granulosa-Theca Tumor Malignant																							1
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenocarcinoma																					X	X	3
Granulosa Cell Tumor Malignant, Metastatic, Ovary																					X	X	1
Squamous Cell Carcinoma																							1
Cervix, Sarcoma Stromal																							1
Cervix, Squamous Cell Carcinoma																							1
Cervix, Endometrium, Polyp Stromal																							1
Endometrium, Polyp Stromal																							3
Endometrium, Polyp Stromal, Multiple																							1
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Polyp																					X		1

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

+ .. Tissue examined microscopically

X - Lesion present

X .. Lesion present
I .. Insufficient tissue

M Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

	DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS FEMALE																				* TOTALS
		0 7 3 0	0 7 3 0	0 7 3 1																		
	ANIMAL ID	0 0 2 3 2	0 0 2 3 3	0 0 2 4 5	0 0 2 5 0	0 0 1 1 1																
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	47
INTEGUMENTARY SYSTEM																						
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenocarcinoma																						2
Adenoma																						3
Fibroadenoma																						22
Fibroadenoma, Multiple																						8
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Subcutaneous Tissue, Fibroma																				X		1
Subcutaneous Tissue, Fibrosarcoma																						1
Subcutaneous Tissue, Hemangiopericytoma																						1
Subcutaneous Tissue, Osteosarcoma																						1
MUSCULOSKELETAL SYSTEM																						
Bone		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
NERVOUS SYSTEM																						
Brain		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
RESPIRATORY SYSTEM																						

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST ANIMAL ID																										* TOTALS		
		0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 1																								
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50			
Adenocarcinoma, Metastatic, Mammary Gland																												1	
Granulosa Cell Tumor Malignant, Metastatic, Ovary																												X	1
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
SPECIAL SENSES SYSTEM																													
Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
URINARY SYSTEM																													
Kidney		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
SYSTEMIC LESIONS																													
Multiple Organ Lymphoma Malignant		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
																												2	

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/L female	DAY ON TEST ANIMAL ID	female (cont...)																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	4	5	5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
	0	9	0	3	5	2	3	3	4	5	8	0	1	1	4	9	1	3	3	3	3	3	3	3	3
	0	0	2	3	9	6	0	8	5	2	6	1	1	4	9	1	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5	7	6	8	5	7	6	5	6	8	8	6	6	7	5	8	9	6	6	7	7	8	9	9	9
	8	8	7	9	6	7	0	9	9	3	8	5	4	0	7	5	0	6	8	6	9	0	6	7	8

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver Hepatocellular Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/L female	DAY ON TEST																					females (cont...)	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	females (cont...)
	0	3	0	9	2	3	9	6	0	8	8	5	2	6	1	1	4	9	1	2	3	0	0
	3	3	0	9	2	3	9	6	0	8	8	5	2	6	1	1	4	9	1	2	3	0	0
	0	0	2	3	9	6	0	8	8	5	2	6	1	1	4	9	1	2	3	0	0	0	0
	0	0	2	2	2	2	8	5	6	7	0	9	3	8	5	4	7	0	9	1	2	3	0
	2	2	2	2	2	2	8	5	6	7	0	9	3	8	5	4	7	0	9	1	2	3	0
	5	7	8	8	7	7	9	6	7	0	9	3	8	5	4	7	0	9	1	2	3	0	0
	8	8	7	7	7	7	9	6	7	0	9	3	8	5	4	7	0	9	1	2	3	0	0

ENDOCRINE SYSTEM

Adrenal Cortex

Adrenal Medulla

Pheochromocytoma Benign
Pheochromocytoma Malignant

Islets, Pancreatic Adenoma

Parathyroid Gland
Carcinoma, Metastatic, Thyroid Gland

Pituitary Gland
Pars Distalis, Adenoma
Pars Distalis, Carcinoma

Thyroid Gland

Schwannoma Malignant, Metastatic, Periphera N

- Nerve
- Bilateral, C-cell, Adenoma
- C-cell, Adenoma
- C-cell, Adenoma, Multiple
- C-cell, Carcinoma

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I., Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

DAY ON TEST																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/L female	3	3	4	5	5	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
	0	9	0	3	5	2	3	3	3	4	5	8	0	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	2	3	9	6	0	8	8	5	2	6	1	4	9	1	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	5	7	6	8	5	7	6	5	6	8	8	6	6	7	5	8	9	6	6	7	7	8	9	9	9
	8	8	7	9	6	7	0	9	9	3	8	5	4	0	7	5	0	6	8	6	9	0	6	7	8

females
(cont...)

Subcutaneous Tissue, Fibroma

X

Subcutaneous Tissue, Schwannoma Malignant

X

MUSCULOSKELETAL SYSTEM

Bone

+ +

NERVOUS SYSTEM

Brain

+ +

Schwannoma Malignant, Metastatic, Peripheral Nerve

X

Peripheral Nerve

+

Trigeminal, Schwannoma Malignant

X

RESPIRATORY SYSTEM

Lung

Nephroblastoma, Metastatic, Kidney

+ +

X

Nose

+ +

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ +

Schwannoma Malignant, Metastatic, Peripheral Nerve

X

Harderian Gland

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

Bilateral, Schwannoma Malignant, Metastatic Peripheral Nerve

3

URINARY SYSTEM

Kidney
Nephroblastoma

Urinary Bladder
Urothelium, Papilloma

SYSTEMIC LESIONS

Multiple Organ Lymphoma Malignant

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
250mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
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2 | | |
| ANIMAL ID | 0
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| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 9 | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 7 | 7 | 7 | 7 | 9 | 9 | |
| | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 4 | 6 | 7 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver
Hepatocellular Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign | | | | | | | X | | | | X | | | | | | | | | | | | 3 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland Carcinoma, Metastatic, Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 47 |
| | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pituitary Gland Pars Distalis, Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Carcinoma | X | | | | X | | | | X | | X | X | | | | | | | | | | | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thyroid Gland Schwannoma Malignant, Metastatic, Peripheral Nerve | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, C-cell, Adenoma | | | | | | | | | | | X | | | | | | | | | | | | 1 |
| C-cell, Adenoma | | | | | | | | | | | X | | | | | | | | | | | | 11 |
| C-cell, Adenoma, Multiple | | | | | | | | | | | | X | | X | | | | | | | | | 1 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | X | | X | | | 2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X - Lesion present

BLANK - Not examined microscopically

| Insufficient tissue

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
250mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
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7 | |
| | * | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

Bilateral, Schwannoma Malignant, Metastatic,
 Peripheral Nerve

1

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney
Nephroblastoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder
Urothelium, Papilloma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | 1 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 4 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 8 | 2 | 5 | 6 | 0 | 1 | 2 | 8 | 8 | 8 | 9 | 9 | 4 | 5 | 7 | 7 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 8 | 0 | 6 | 3 | 0 | 9 | 9 | 3 | 5 | 8 | 2 | 2 | 2 | 1 | 5 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| females
(cont...) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 7 | 0 | 1 | 5 | 3 | 3 | 1 | 7 | 1 | 3 | 6 | 9 | 6 | 0 | 5 | 8 | 2 | 9 | 4 | 8 | 2 | 3 | 4 | 5 | 6 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|------------------------------------|---|
| Mesentery | + |
| Leiomyosarcoma, Metastatic, Vagina | X |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE | 500mg/L female | 2 | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 7 | 8 | 2 | 5 | 6 | 0 | 1 | 2 | 8 | 8 | 8 | 9 | 4 | 5 | 7 | 6 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 0 | 1 | 4 | 2 | 0 | 3 | 2 | 1 | 1 | 4 | 0 | 1 | 2 | 3 | 0 | 4 | 4 | 0 | 3 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 7 | 0 | 1 | 5 | 3 | 3 | 1 | 7 | 1 | 3 | 6 | 9 | 6 | 0 | 5 | 8 | 2 | 9 | 4 | 8 | 2 | 3 | 4 | 5 | 6 | 6 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Paraovarian Tissue, Leiomyosarcoma,
Metastatic, Vagina | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Endometrium, Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | X | | X |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * | .. Total animals with tissue examined microscopically; Total animals with tumor | | | | | | | | | | | | | | | | | | | | | | | | | | |
| + | .. Tissue examined microscopically | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | .. Lesion present | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I | .. Insufficient tissue | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M .. Missing tissue | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A .. Autolysis precludes evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BLANK .. Not examined microscopically | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

Zymbal's Gland
Adenocarcinoma

-
X

URINARY SYSTEM

Kidney

Urinary Bladder

Leiomyosarcoma, Metastatic, Vagina

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear
Lymphoma Malignant

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I., Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
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 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|----------|---|
| | | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
7
3
2 | | | | |
| ANIMAL ID | 0
0
3
1
8 | 0
0
3
3
1 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
0 | 0
0
3
3
2 | * TOTALS | | |
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 | | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
| | | 0
7
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1 | 0
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1 | 0
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3
1 | 0
7
3
1 | 0
7
3
2 | | |
| ANIMAL ID | 0
0
3
1
8 | 0
0
3
2
0 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
5
9 | 0
0
3
0
0 | 0
0
3
1
1 | 0
0
3
2
2 | 0
0
3
3
4 | 0
0
3
4
5 | 0
0
3
3
4 | 0
0
3
3
5 | 0
0
3
3
4 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Paraovarian Tissue, Leiomyosarcoma,
Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | 2 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | 1 |
| Endometrium, Polyp Stromal | | | X | X | | X | | | | | | | | | | | | | | | | 7 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal, Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

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Sodium Tungstate Dihydrate

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|-----------|----------|
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| | | 1 | 2 | 4 | 4 | 4 | 5 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | | | |
| | | 8 | 0 | 6 | 7 | 9 | 0 | 1 | 2 | 4 | 1 | 2 | 4 | 1 | 2 | 5 | 4 | 5 | 2 | 3 | 4 | 7 | 8 | 9 | 6 | 7 | 8 | 9 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Fibroadenoma | | | X | | X | X | | | X | | | | | | | | | | | | | | | | | | | | 15 | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| Skin | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Diaphragm, Leiomyosarcoma, Metastatic,
Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Trachea | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Harderian Gland | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

X .. Lesion present

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Experiment Number: 03038 - 03

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Test Type: CHRONIC

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Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

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First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | DAY ON TEST | ANIMAL ID | Data Rows | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-----------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 1 | 2 | 4 | 4 | 4 | 4 | 5 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| 8 | 0 | 6 | 7 | 9 | 0 | 1 | 2 | 4 | 1 | 2 | 5 | 4 | 5 | 4 | 5 | 2 | 3 | 4 | 7 | 8 | 9 | 6 | 7 | 8 | 9 | 0 |

Zymbal's Gland
Adenocarcinoma

1

1

URINARY SYSTEM

Kidney

Urinary Bladder

Leiomyosarcoma, Metastatic, Vagina

50

1

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear
Lymphoma Malignant

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

X. Lesion present

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| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 1 | 5 | 7 | 1 | 1 | 5 | 8 | 0 | 2 | 4 | 2 | 2 | 8 | 6 | 9 | 4 | 8 | 6 | 4 | 0 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 3 | 4 | 8 | 1 | 8 | 3 | 3 | 1 | 4 | 2 | 2 | 8 | 6 | 9 | 4 | 8 | 6 | 4 | 0 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 8 | 6 | 0 | 8 | 7 | 8 | 7 | 9 | 6 | 7 | 9 | 8 | 5 | 6 | 5 | 5 | 9 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 8 |
| | 0 | 3 | 0 | 1 | 5 | 9 | 0 | 8 | 2 | 7 | 7 | 8 | 7 | 6 | 2 | 3 | 3 | 7 | 9 | 6 | 8 | 0 | 8 | 9 | 6 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

First Dose M/F: 01/30/12 / 01/31/12

Species/Strain: RATS/HSD

Lab: BAT

| | DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/L female | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | ANIMAL ID | 0 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 8 | 6 | 0 | 8 | 7 | 8 | 7 | 9 | 6 | 7 | 9 | 8 | 5 | 6 | 5 | 5 | 9 | 6 | 5 | 5 | 6 | 6 | 6 | 8 | 8 | |
| | | 0 | 3 | 0 | 1 | 5 | 9 | 0 | 8 | 2 | 7 | 7 | 8 | 7 | 6 | 2 | 3 | 3 | 7 | 9 | 6 | 8 | 0 | 8 | 9 | 6 | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | X | | X | X | | | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | |
| Bilateral, C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ Lymphoma Malignant

**females
(cont...)**

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I. Insufficient tissue

Experiment Number: 03038 - 03
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:13:17
 First Dose M/F: 01/30/12 / 01/31/12
 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
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| ANIMAL ID | | 0
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9 | |
| | * | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangioma | | | | | | | | | | | | | | | | | X | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Mesentery | | + | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

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Date Report Requested: 06/26/2019

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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 Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----|----------|---|
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| ANIMAL ID | 0
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9 | 0
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9 | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Adenocarcinoma | | | | | | | | X | | X | | | | | | | | | | | | | | | | 5 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Endometrium, Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| Endometrium, Polyp Stromal, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | | | | | | | X | | X | | | | | | | | | | | | | | | | 2 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000mg/L female | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|----------|
| | | 0
7
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0 | 0
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0 | 0
7
3
1 | 0
7
3
2 | | |
| Fibroadenoma | | X | X | | | X | | X | | | | | | | | | | | | | | 15 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | 3 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lipoma | | | | | | | | | | | | | | | | | | | | | X | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

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Lab: BAT

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically: Total animals with tumo

+ .. Tissue examined microscopically

X - Lesion present

X .. Lesion present

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